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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,605	01/14/2002	John Briar	ST1998-001 B	7465

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GEORGE O. SAILE & ASSOCIATES
28 DAVIS AVENUE
POUGHKEEPSIE, NY 12603

EXAMINER

ROSE, KIESHA L

ART UNIT PAPER NUMBER

2822

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,605

Applicant(s)

BRIAR, JOHN

Examiner

Kiesha L. Rose

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the amendment filed 27 May 2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11,12 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (Figures 1 and 4) in view of Huang (U.S. Patent 5,961,912) and Freyman et al. (U.S. Patent 5,635,671).

Applicant's Prior Art discloses an electronic circuit package (Figs. 1 and 4) that contains a substrate (10) having a first surface and a second surface, wherein the first surface has a gating area, conductive traces (18) on first surface of substrate in the gating area, an electronic device (integrated circuit) (12) attached to first surface of substrate, electrical connections (wire bond) (16) between electronic device and conductive traces, input/output connections (ball grid array) (24) formed on second surface of the substrate, electrical connections (22) between conductive traces and input/output connections, encapsulation (14) formed over part of the substrate and the electronic device as an encapsulating mold compound and a encapsulating material (33) forming a mold runner. Applicant's Prior Art discloses all of the limitations except a

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barrier material attached to the gating area of the substrate. Whereas Huang discloses an electronic device (Fig. 5) that contains a substrate (320) with a barrier material such as polyimide tape or high temperature plastic formed on the substrate. (Column 3, lines 45-47) The barrier material is added to stop warpage during encapsulant injection process. (Column 3, lines 37-38) Since Applicant's Prior Art and Huang are both from the same field of endeavor, electronic devices, the purpose disclosed by Huang would have been recognized in the pertinent art of Applicant's Prior Art. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention as made to modify the electronic device of Applicant's Prior Art by incorporating a barrier material on the substrate to prevent warping during the encapsulation injection process as taught by Huang. Applicant's Prior Art and Huang disclose all the limitations except for conductive traces formed in grating area. Whereas Freyman discloses an electronic device (Fig. 9) that contains a grating area (902) with a gold region (conductive trace) to achieve top gating to degate without damaging the device. (Abstract) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the devices of the Applicant's Prior Art and Huang to add conductive traces to the gating area to degate without damaging the device as taught by Freyman.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

Applicant's arguments with respect to claims 11,12 and14-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiesha L. Rose whose telephone number is 703-605-4212. The examiner can normally be reached on M-F 8:30-6:00 off 1st Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 703-308-4905. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

KLR

KLR

June 25, 2003


AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800